AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-120

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-120.01
Dayton 2006 Update from AMSAT Director Field Operations

AMSAT News Service Bulletin 120.01
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.01

The main AMSAT Forum at the 2006 Dayton Hamvention will be held Saturday morning, May 20th, from 8:15 AM to 10:45 AM in Forum Room 1. This year, we will have a larger meeting room and more time. We have a great program scheduled, so come by, help us fill the room, and spend Saturday morning with us to find out the most up to date information on P3E, EAGLE, AO-51, ARISS and AMSAT.

The speakers will be:

1. Moderator: Barry Baines, WD4ASW, VP-Marketing & User Services, AMSAT-NA.
2. Rick Hambly, W2GPS, President, AMSAT-NA "Phase 3-E Satellite Design and Development Status."
3. Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Project Overview and Status Report."
4. EAGLE Project Development Team "Technology Update: Software Defined Transponder, Internal Housekeeping Unit, Energy Storage Experiments, and Structure Analysis."
5. Gould Smith, WA4SXM, Director Field Operations, AMSAT-NA "Introduction to AO-51 Operation with a Command Station Update."
6. Frank Bauer, KA3HDO, VP-Human Space Flight, AMSAT-NA "ARISS & SuitSat: Current Status & Future Opportunities."

Special emphasis will be placed on the status of AMSAT-NA EAGLE satellite project and the AMSAT-DL P3E.

The AMSAT Educator's Forum will be held Saturday from 11:30 to 12:15 AM in

Forum Room 5.

1. Dr. H. Paul Shuch, N6TX, Director of Education, AMSAT-NA "Shared Experiences of Using Satellites in the Classroom."

Please make your reservations early for the Friday night AMSAT Banquet at the Amber Rose. Great food, great companionship.

Contact Nancy Makley, kc8gyw@amsat.org to make your reservations.

In addition to passing on the above information, Gould Smith, AMSAT Director Field Operations, issued a call for volunteers at Dayton 2006:

"We are looking for a few good men or women to help at the AMSAT booth during the Dayton Hamvention. I always find this a rewarding experience, whether talking with longtime AMSAT members or a shy, interested person that is not sure how to start.

The booth will be open Friday May 19th from 9 AM to 6 PM, Saturday May 20th, 8 AM to 5 PM and Sunday 8 AM to 1 PM.

We need people to answer questions about satellite operation, take donations for publications and trinkets, memberships and renewals, demonstrate software and assist with satellite demos. Please volunteer for a two hour shift each day while you are attending the Hamvention. If you can only find an hour, that will also be welcomed.

Send me an email at: wa4sxm@amsat.org

Also take advantage of our Thursday night 'Pizza and Suds' gathering at Mario's Piazza and the Friday night Banquet at the Amber Rose. Contact Nancy Makley at kc8gyw@amsat.org for reservations.

If you will be unable to help at the booth, come by and check out our new offering and see the operating EAGLE SDX (Software Defined Transponder) or just say HI to your fellow AMSAT members."

Gould, WA4SXM
AMSAT Director Field Operations

[ANS thanks Gould, WA4SXM, AMSAT Director Field Operations for the above information]

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SB SAT @ AMSAT $ANS-120.02
AO-51 Ops Committee Call for Volunteers

AMSAT News Service Bulletin 120.02
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.02

Drew Glasbrenner, KO4MA, issued the following request for volunteers for the AO-51 Ops Committee:

"As you may have seen in the last ANS, I have been asked by Mike Kingery KE4AZN, AMSAT VP Ops, to take the reins of the AO-51 Ops committee. As part of the changeover, it is my intent to include a wider range of volunteers to the group. Some of my other goals include getting the schedule ready earlier each month, better explaining the reasons behind the choices on each schedule, and continuing and expanding our support of new innovative modes and experiments.

I would like to ask that any members interested in serving on the committee send me an email detailing why they would be a good choice for the job. Typically our job includes taking requests for different modes from the email list and creating a monthly schedule that agrees with the times the command station is available, answering emails to the modes list, supporting special events such as Kids Day and Field Day, and participating in the different modes to ascertain their usefulness and popularity. My criteria for interested volunteers is that they are a current member of AMSAT, are active on AO-51 on a regular basis, have a amsat.org email alias, and have good email access and time to answer emails.

I'd like to have all the volunteers in place by May. Some of the most urgent short term goals include articles and information regarding the upcoming Kids Day, and Field Day. We'll have to hit the ground running on these items."

Thanks and Best 73,
Drew Glasbrenner KO4MA

[ANS thanks Drew, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-120.03
AMSAT Receives HP Technology for Community Grant Initiative

AMSAT News Service Bulletin 120.03
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.03

On Monday, April 24, 2006, AMSAT was notified that it will receive an award from the 2006 Hewlett-Packard Technology for Community Grant Initiative. AMSAT competed with more than 2,000 nonprofit organizations for one of 99 awards. AMSAT will receive HP mobile and wireless technology packages valued at approximately $17,000. This equipment will be used in the AMSAT office and by AMSAT project teams to enhance our productivity and further our mission goals.

Achieving this award was a team effort. AMSAT Secretary Steve Diggs, W4EPI, was responsible for AMSAT's initial qualification while AMSAT Treasurer Gunther Meisse, W8GSM, and Board Member Dr. Thomas A. Clark, K3IO, wrote the proposal. According to HP "Selection of the final grant awardees was very competitive" so the proposal team deserves special recognition for a job well done.

The 2006 HP Technology for Community Grant Initiative award includes the following:

+ Five HP Notebook PCs
+ One HP Tablet PC
+ One HP iPAQ Pocket PC
+ A wireless-ready HP all-in-one printer/scanner/fax/copier
+ A wireless-ready HP digital projector and wireless remote control
+ A wireless access point
+ An HP digital camera bundle
+ A $1000 stipend
+ Training to set up a new wireless network

Each organization will receive the same grant award.

Rick, W2GPS

AMSAT President

[ANS thanks Rick, W2GPS, AMSAT President for the above information]

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SB SAT @ AMSAT $ANS-120.04
ARISS Status 24 April 2006

AMSAT News Service Bulletin 120.04
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.04

1. Upcoming School Contacts

Bob Jones High School in Madison Alabama (Jeff Williams' crew pick) has been approved for an ARISS contact. It has been scheduled for Monday, May 1 at 18:36 UTC via the telebridge station VK5ZAI in Australia. The audio from this contact will be fed into the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference servers. It will also be available on the IRLP Discovery reflector 9010.

Jaanimmarik School in Kuujjuaq, Quebec, Canada has been scheduled for a contact on Thursday, May 4 at 18:10 UTC via the telebridge station VK5ZAI in Australia. The audio from this contact will be fed into the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference servers. It will also be available on the IRLP Discovery reflector 9010.

2. School Committee Meeting Held

The ARISS Educational Outreach/School Selection Committee meeting was held on Thursday, April 13.  Among the topics covered were lesson plans status, the Expedition 13 school crew picks and SuitSat QSL (confirmation) cards. The minutes have been posted on the ARISS web site. See: http://www.rac.ca/ariss/arissschm.htm

3. 2006 Dayton Hamvention

The 2006 Dayton Hamvention will be held on May 19 - 21.  AMSAT and ARRL will both set up exhibition booths at the event which is attended by 25,000 ham enthusiasts annually.  ARISS Chairman Frank Bauer plans to attend and give a presentation, "ARISS & SuitSat: Current status & future opportunities," on Saturday May 20 at the AMSAT Forum. For more information on the event, see: http://www.hamvention.org/

4. ARISS International Meeting Held

The monthly ARISS International Team Meeting was held by teleconference on April 18. Agenda items discussed included program funding, SuitSat certificates and Slow Scan Television. The minutes have been posted to the ARISS web site: http://www.rac.ca/ariss/arisstel26.htm

The next ARISS International teleconference will be held on May 23.

5. ARISS Members to Participate in Space Day Events

The Steven F. Udvar-Hazy Center will celebrate Space Day on May 5. The center plans on a full day of activities with appearances by several astronauts. An AMSAT exhibition booth will be set up at the event which will include an ARISS display. Representatives will be available to inform students and the general public of the ARISS program.

6. Crew Debrief Plans

The U.S. team has been compiling questions for the crew debrief with Bill McArthur, KC5ACR. The meeting is expected to take place in late May.

7. Escola Americana do Rio de Janeiro Video

Marcos Pontes participated in an ARISS contact with students from the Escola Americana do Rio de Janeiro. Video clips of the event are now available. See: http://www.arissbr.org/globo.mpg

http://www.arissbr.org/tve.mpg

http://www.arissbr.org/sbt.mpg

8. Jeff Williams Makes General Contacts

Astronaut Jeff Williams, KD5TVQ, has already made general radio contacts from on board the ISS.  On April 21, ARRL ran an article, "ISS crew member gets early start on ham radio." See: http://www.arrl.org/

[ANS thanks Carol, KB3LKI for the above information]

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SB SAT @ AMSAT $ANS-120.05
Astronaut Bill McArthur Thank You Guestbook

AMSAT News Service Bulletin 120.05
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.05

Your help needed!!

Astronaut Bill McArthur was very active on ham radio during his 6-month mission aboard the ISS. McArthur enjoyed amateur radio and gave many amateurs the chance to talk with an astronaut on the Space Station.

Cor, PD0RKC, is making a CDROM for McArthur with MP3 audio files from the many amateur radio contacts that he made during his mission. Pictures of operators will also be included.

If you have audio files for this CDROM or you know of web sites where Bill McArthur (NA1SS) audio files - including school contact files - can be found, please send them to: wegaman@gmail.com

The CDROM will be delivered to Bill McArthur via Kenneth Ransom, N5VHO (NASA JSC.)

To sign the guestbook visit: http://www.pd0rkc.com

[ANS thanks Cor, PD0RKC for the above information]

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SB SAT @ AMSAT $ANS-120.06
Best Satellite DX for Home Microwave Station

AMSAT News Service Bulletin 120.06
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS

BID: $ANS-120.06

Luis, CT1DMK has detected Voyager 1 on 8420.4286 MHz (~8 GHz) while it is about 98 Astronomical Units from earth. This is 3 times further away from Earth than Pluto at approximately 14698 million Km.

Since this signal is well below the noise floor of a conventional receiver Luis employed a combination of his homebrew 8 GHz receiver design used with his 5.6 meter dish along with software for digital signal processing.

Luis said, "I had to acquire and integrate spectrograms for a long time. I did several acquisition periods of 15 minutes (900 seconds). My receiver is operated at fixed frequency and the Doppler variation were corrected by skewing successive spectrograms in software. Positive identification Voyager's signal arises from the fact that signal is only visible for the right skew amount that corresponds to the Doppler variation as predicted by the relative velocity calculation."

Luis' has recorded additional success at 8 GHz by receiving these Deep Space Network spacecraft:

+ Mars Reconnaissance Orbiter in orbit around Mars on 8.438444 GHz at a distance
of 243 million Km from earth.

+ Mars Express on 8.420432 GHz also at a distance of 243 million Km from earth.

+ Mars Odyssey on 8.406852 GHz at 243 million Km from earth.

+ Rosetta on 8.421790 GHz 'en route' to the comet 67P, at a distance of 389 million Km from earth.

+ New Horizon Pluto Charon on 8.4378947 GHz while en-route to Pluto but still
relatively close to earth at about 104 million Km from earth.

Details of Luis' operations can be found on-line at:
http://w3ref.cfn.ist.utl.pt/cupido/dsn.html

[ANS thanks Luis, CT1DMK for the above information]

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SB SAT @ AMSAT $ANS-120.07
Sunspot 875 A Crackling Sunspot

AMSAT News Service Bulletin 120.07
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
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Sunspot 875 is crackling with solar flares. A C8-category blast on 27 April lit up a region around the spot big enough to swallow Earth more than 20 times. Sunspot 875 has a tangled, complex magnetic field that harbors energy for even stronger M-flares. View a movie of the flare at:
http://spaceweather.com/

[ANS thanks SpaceWeather.com for the above information]

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In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to
AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG